

CLAIMS

What is claimed is:

1. A method of sorting a plurality of items by destination, the method comprising:
defining a number of locations, where each location is a position for a container;
5 assigning each location a speed of loading rating;
creating a scheme of destinations;
reading a destination code from each of the plurality of items;
determining whether the destination code is assigned a location;
if the destination code is assigned a location, loading the item in a
10 container at the assigned location;
if the destination code is not assigned a location, determining whether to
assign the destination code a location based on whether the destination code is
in the scheme of destinations, the projected or historical number of items having
the same destination code, and the speed of loading rating for each location.
- 15 2. A method as claimed in claim 1, further comprising:
recirculating an item when a determination is made not to assign the destination
code a location.
3. A method as claimed in claim 1, further comprising:
rejecting an item when a determination is made not to assign the destination
20 code a location.
4. A method as claimed in claim 1, wherein determining whether to assign the
destination code is further based on reviewing a set of restrictions.
5. A method as claimed in claim 4, wherein the set of restrictions includes the type
of container in which items are loaded.

6. A method as claimed in claim 4, wherein the set of restrictions includes a work zone in which containers for items are located.

7. A method as claimed in claim 4, wherein the set of restrictions includes a limit on the number of locations to be assigned to any one destination.

5 8. A method as claimed in claim 2, further comprising tracking the number of items in recirculation.

Sub a5 9. A dynamic sortation system comprising:

a cell having a plurality of locations, each location defining a position for a container and having a speed of loading rating;

10 ✓ a sort scheme module capable of generating a database and storing a scheme of destinations;

a controller coupled in data communication with the sort scheme module; and

an item reader coupled in data communication with the controller and capable

15 of reading a destination code from each of a plurality of items,

10 15 wherein, the sort scheme module is capable of determining whether a read destination code is assigned a location in the cell, and if the destination code is assigned a location, generating an instruction to load the item in a container at the assigned location, and if the destination code is not assigned a location, determining whether to assign the destination code a location based on whether the destination code is in the scheme of destinations and the projected or historical number of items having the same destination code.

20 10. A dynamic sortation system as claimed in claim 9, wherein the sort scheme module determines whether to assign the destination code a location based on the speed of loading rating for each location.

11. A dynamic sortation system as claimed in claim 9, wherein each cell is divided into at least two zones.

12. A dynamic sortation system as claimed in claim 9, wherein each destination code takes the form of a bar code.

5 13. A dynamic sortation system as claimed in claim 12, wherein the item reader is a barcode reader.

14. A dynamic sortation system as claimed in claim 9, wherein each destination code is selected from the group of ZIP, CIN, DOD, and AIN codes.

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15. A method of sorting a plurality of items by destination, the method comprising:
defining a number of locations, where each location is a position for a container;
creating a scheme of destinations;
reading a destination code from each of the plurality of items;
determining whether the destination code is assigned a location;
if the destination code is assigned a location, loading the item in a
container at the assigned location;
if the destination code is not assigned a location, determining whether to
assign the destination code a location based on whether the destination code is
in the scheme of destinations and the projected or historical number of items
having the same destination code.

20 16. A method as claimed in claim 15, further comprising assigning each location a speed of loading rating.

17. A method as claimed in claim 16, wherein determining whether to assign the destination code a location is also based on the speed of loading rating for each location.

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18. A method as claimed in claim 15, further comprising:
recirculating an item when a determination is made not to assign the destination
code a location.

19. A method as claimed in claim 15, further comprising:

5 rejecting an item when a determination is made not to assign the destination
code a location.

20. A method as claimed in claim 15, wherein determining whether to assign the
destination code is further based on reviewing a set of restrictions.

21. A method as claimed in claim 20, wherein the set of restrictions includes the
10 type of container in which items are loaded.

22. A method as claimed in claim 20, wherein the set of restrictions includes a work
zone in which containers for items are located.

23. A method as claimed in claim 20, wherein the set of restrictions includes a limit
on the number of locations to be assigned to any one destination.

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